APR - 6 2011

510(k) Summary Temporomandibular coil 15 Esaote, S.p.A.

# 510(k) Summary

The following 510(k) summary has been prepared pursuant to requirements specified in 21CFR 807.92(a).

### **Submitter Information**

Donatella Ragghianti Esaote S.p.A. Via Siffredi 58 Genova 16153 Italy

Contact Person:

Allison Scott, RAC

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Date:

February 7, 2011

Trade Name:

Temporomandibular Coil 15

Common Name:

Coil, Magnetic Resonance, Specialty

Classification Name(s):

Magnetic resonance diagnostic device

Classification Number:

90MOS

#### Predicate Device(s)

Tradename	Common name	Class	Product code	Manufacturer	K number
S-scan	System, nuclear magnetic resonance imaging	II	LNH	Esaote S.p.A.	K080968
Magnetom Avanto 1.5 T Loop coil	Coil, Magnetic Resonance, Specialty	II	MOS	SIEMENS AG MEDICAL SOLUTIONS	K070629

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## **Device Description**

S-scan is a Magnetic Resonance (MR) system, which produces images of the internal structures of the patient's limbs and joints.

This 510(k) is to add the Temporomandibular coil. This is a single channel surface receiving coil, shaped for suitability to the areas under examination and designed to be matched to the patient's temporomandibular joint; the coil is also morphologically adapted to the examined area to obtain a good Signal-to-Noise Ratio.

#### Intended Use(s)

S-scan is a Magnetic Resonance (MR) system that produces transverse, sagittal and coronal and oblique cross-section images of the limbs, joints and spinal column. It is intended for imaging portions of the upper limb, including the hand, wrist, forearm, elbow, arm and shoulder, imaging portions of the lower limb, including the foot, ankle, calf, knee, thigh and hip, imaging of the temporomandibular joint and imaging the cervical spine and the lumbar spine sections as portions of the spinal column.

S-scan images correspond to the spatial distribution of protons (hydrogen nuclei) that determine magnetic resonance properties and are dependent on the MR parameters, including spin-lattice relaxation time (T1), spin-spin relaxation time (T2), nuclei density, flow velocity and "chemical shift". When interpreted by a medical expert trained in the use of MR equipment, the images can provide diagnostically useful information.

## **Technological Characteristics**

The technological characteristics of the S-scan system with the addition of the Temporomandibular Coil, reflected in this Traditional 510(k), are substantially equivalent to those of the predicate devices.

#### Performance Data

Non-clinical testing of the S-scan system with the addition of the Temporomandibular Coil demonstrated that it met performance requirements and is as safe and effective as the predicate devices.





Food and Drug Administration 10903 New Hampshire Avenue Document Control Room – WO66-G609 Silver Spring, MD 20993-0002

Esaote, S.p.A. % Ms. Allison Scott, RAC Official Correspondent The Anson Group 11460 N Meridian St., Ste 150 CARMEL IN 46032

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Re: K110373

Trade/Device Name: Temporomandibular coil 15

Regulation Number: 21 CFR 892.1000

Regulation Name: Magnetic resonance diagnostic device

Regulatory Class: II Product Code: MOS Dated: February 7, 2011 Received: February 8, 2011

#### Dear Ms. Scott:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into class II (Special Controls), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Parts 807); labeling (21 CFR Parts 801 and 809); medical device reporting (reporting of

medical device-related adverse events) (21 CFR 803); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Parts 801 and 809), please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 796-5450. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <a href="http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm">http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</a> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely Yours,

Mary S. Pastel, Sc.D.

Director

Division of Radiological Devices Office of In Vitro Diagnostic Device

Mary Statel

**Evaluation and Safety** 

Center for Devices and Radiological Health

Enclosure

# **Indications for Use**

510(k) Number (if known):
Device Name: Temporomandibular coil 15
Indications for Use:
The S-scan Temporomandibular Coil is to be used in MR imaging of the temporomandibular joint.
S-scan is a Magnetic Resonance (MR) system that produces transverse, sagittal and coronal and oblique cross-section images of the limbs, joints and spinal column. It is intended for imaging portions of the upper limb, including the hand, wrist, forearm, elbow, arm and shoulder, imaging portions of the lower limb, including the foot, ankle, calf, knee, thigh and hip, imaging of the temporomandibular joint and imaging the cervical spine and the lumbar spine sections as portions of the spinal column.  S-scan images correspond to the spatial distribution of protons (hydrogen nuclei) that determine magnetic resonance properties and are dependent on the MR parameters, including spin-lattice relaxation time (T1), spin-spin relaxation time (T2), nuclei density, flow velocity and "chemical shift". When interpreted by a medical expert trained in the use of MR equipment, the images can provide diagnostically useful information.
Prescription Use X AND/OR Over-The-Counter Use (Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)  (PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE
IF NEEDED)
Concurrence of CDRH, Office of Device Evaluation (ODE)
(Division Sign-Off)  Division of Radiological Devices Office of In Vitro Diagnostic Device Evaluation and Safety

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